

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
)	
Proposed Changes in the Commission's Rules)	ET Docket No. 03-137
Regarding Human Exposure to Radiofrequency)	
Electromagnetic Fields)	

COMMENTS OF SPRINT CORPORATION

Sprint Corporation ("Sprint") submits these comments in response to the Federal Communications Commission's ("FCC" or "Commission") Notice of Proposed Rulemaking proposing various changes to the Commission's rules regarding human exposure to radiofrequency ("RF") electromagnetic fields.¹

The substitution of separation distance for antenna height in defining categorical exclusions from routine environmental evaluations for fixed transmitters on rooftops represents a significant departure from the existing standard. If the Commission utilizes separation distance as a triggering factor for categorical exclusions for fixed rooftop antennas, it should make clear that such distance relates to the main beam of the antenna. Occupational/controlled exposure limits should be applicable in cases where persons are made fully aware of the potential for exposure through written *or* verbal instruction, but not necessarily both. Finally, whatever categorical exclusion rules are ultimately adopted should be applied on a prospective basis only and existing antennas sites should be grandfathered.

¹ *Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields*, Notice of Proposed Rulemaking, 18 FCC Rcd 13187 (2003) ("NPRM").

1. Separation Distances Triggering Categorical Exclusions Should Be Based Upon Proximity To The Main Beam Of The Antenna.

If the Commission relies upon separation distance to the antenna as a factor in defining categorical exclusions for rooftop antennas, it should define separation distance to mean the minimum distance from the main beam of the antenna to account for the actual RF exposure potential of directional antennas utilized in broadband Personal Communications Service (“PCS”) and other wireless networks. With respect to directional antennas, RF exposure is likely to be significantly lower outside the main beam of the antenna. Many rooftop antennas are directional antennas that are installed just over or right at the edge of the rooftop with the beam directed outward from the building such that no person would have access to the main beam of the antenna. For such antenna installations, the RF exposure potential would be limited to whatever RF fields might be present at the side-lobes and back-lobes of the antenna, which are substantially attenuated from the main beam. For example, the average front-to-back signal attenuation on a standard directional antenna used in a PCS network ranges around 30 dB, but can be much greater. The proposed definition of separation distance, however, looks at the minimum distance “from any part of the radiating structure of a transmitting antenna in any direction to any area that may be entered by a member of the general public,” which would capture these directional rooftop antenna installations because it is predicated to mere proximity to the radiating structure. Such definition appears overly inclusive and should be revised to account for the actual RF exposure potential and variances in antenna placements.

2. Occupational/Controlled Exposure Eligibility Should Be Based Upon Either Written Or Verbal Training.

Under the Commission’s rules, the higher RF exposure limits adopted for “occupational/controlled” exposure apply in cases where persons are “fully aware” of the

potential for exposure.² The *NPRM* proposes to revise the rules to clarify the responsibilities of licensees with respect to making workers “fully aware” of exposure potential by defining “fully aware” to mean that an exposed individual has received both “written *and* verbal information concerning the potential for RF exposure”³ There is no rationale for requiring licensees to provide both written and verbal information to workers on RF exposure – either method of communication will achieve this singular purpose. Accordingly, the proposed rule revision should be further revised to define “fully aware” to mean that an exposed individual has received “written or verbal information concerning the potential for RF exposure”

3. Any New Categorical Exclusion Rules Adopted By The Commission Should Only Be Applied On A Prospective Basis.

The *NPRM* proposes to adopt a six-month transition period for licensees and applicants to determine whether the rule revisions might “require additional routine evaluation for some previously categorically excluded transmitters and devices.”⁴ Sprint submits that the Commission should grandfather existing rooftop antenna placements rather than requiring such facilities to undergo routine evaluations within six months or some other date-certain based upon whatever new categorical exclusion standard it ultimately adopts.

The *NPRM*’s proposed categorical exclusion standard for rooftop antennas is predicated upon criteria that are more restrictive than the existing standard – *e.g.*, for rooftop PCS antennas, the power threshold criterion of the new standard for triggering routine evaluations has been lowered ten-fold and a proximity criterion would be applied where no such criterion existed before. It seems possible that many of the tens of thousands of existing rooftop antennas across

² See 47 C.F.R. § 1.1310, Note 1 to Table 1.

³ *NPRM*, Appendix A, proposed § 1.1307, Table 1, Note (*italics added*).

⁴ *NPRM* at ¶ 49.

the U.S. would fail to qualify for categorical exclusion under the proposed standard. Thus, application of the new standard to existing sites could subject a significant proportion of existing rooftop antenna sites to review and routine evaluation. Many licensees already perform routine evaluations for every one of their antenna sites – including antennas that are otherwise categorically excluded under the existing standard – and those sites presumably would not be affected by application of the proposed rules. Nonetheless, mandating the performance of routine evaluations for potentially thousands of existing antennas across the U.S. represents an immense burden for licensees that should not be imposed absent clear and convincing evidence that the existing standard has resulted in antenna installations that pose an unmitigated and unacceptable risk of non-compliance with the Commission's RF exposure guidelines.

Conclusion

Sprint urges the Commission to adopt the recommendations detailed above.

Respectfully submitted,

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